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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
09/104,947	06/25/98	FORBORD	K I169.12-0314

TM11/1017
SHAWN B. DEMPSTER, SEAGATE TECHNOLOGY L
INTELLECTUAL PROPERTY DEPT SHK2LG
1280 DISC DRIVE
SHAKOPEE, MN 55379-1863

EXAMINER

KORZUCH, W

ART UNIT

PAPER NUMBER

2652

DATE MAILED: 10/17/00

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.
09/104,947

Applicant
Kent Forbord

Examiner
William Korzuch

Group Art Unit
2652



☒ Responsive to communication(s) filed on Jan 18, 2000

☐ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims

☒ Claim(s) 1-20 is/are pending in the application.

Of the above, claim(s) 8-10 and 15-17 is/are withdrawn from consideration.

☐ Claim(s) _____ is/are allowed.

☒ Claim(s) 1-7, 11-14, and 18-20 is/are rejected.

☐ Claim(s) _____ is/are objected to.

☐ Claims _____ are subject to restriction or election requirement.

Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been
☐ received.

☐ received in Application No. (Series Code/Serial Number) _____.

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

☒ Notice of References Cited, PTO-892

☒ Information Disclosure Statement(s), PTO-1449, Paper No(s). 5

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

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Election/Restriction

1. Applicant's election of Species A in Paper No. 11 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).
2. Claims 8-10 and 15-17 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected species.

Claim Objections

3. Claims 5, 7, 13 and 20 are objected to because of the following informalities: In claims 5, 7, 13 and 20, line 2, "motor spindle" should be -- spindle motor --. In claim 13, line 2, -- and -- should be inserted after "discs". Appropriate correction is required.

Claim Rejections - 35 USC § 112

4. Claims 1-7, 11-14 and 18-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to

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particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claims 1 and 3, line 3, "a standard configuration" is vague and indefinite.

In claims 1 and 3, lines 6 and 7, the language "the diameter of rigid discs ordinarily contained in a disc drive housing" is vague and indefinite.

In claim 1, lines 7 and 8, "the standard configuration" is vague and indefinite.

In claims 2, 4, 11 and 18, line 2, "a standard 3½ inch external three-dimensional configuration" is vague and indefinite.

In claim 3, lines 8 and 10, "the standard configuration" is vague and indefinite.

In claim 3, line 9, "ordinarily contained" is vague and indefinite.

In claims 6, 12, 14 and 19, lines 1 and 2, "the magnetic recording discs" lacks proper antecedent basis.

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Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-7, 11-14 and 18-20 are rejected under 35

U.S.C. 103(a) as being unpatentable over Nishida et al (U.S. Patent 5,189,577) in view of Best et al (U.S. Statutory Invention Registration H1221).

With regard to claims 1 and 2, Nishida et al shows a disk drive assembly including: a disk drive housing having an external three-dimensional configuration matching a 3½ inch external three-dimensional configuration; and a disk drive supported in the housing having a stack of rotatable rigid recording discs; and a head/actuator assembly for reading data to and writing data from selected ones of the discs. Nishida et al does not show the disk diameter. Best et al shows that it is known in the art to have disks with a 65 mm diameter. It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the disk drive of Nishida et al with disks having

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a diameter of 65 mm as taught by Best et al. The rationale is as follows: One of ordinary skill in the art at the time of the invention would have been motivated to provide the disk drive of Nishida et al with disks having a diameter of 65 mm as taught by Best et al since it reduces access times by having shorter distances over which the heads must traverse. Additionally, reducing the disk diameters allows more space inside of the disk drive for the other disk drive components.

With regard to claims 3, 4, 11 and 18, Nishida et al further shows that the number of disks is six.

With regard to claims 5, 7, 13 and 20, Nishida et al does not show the speed of the spindle motor. Best et al, on the other hand, teaches a spindle motor that rotates at 10,000 rpm. It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the disk drive of Nishida et al with a spindle motor that rotates at 10,000 rpm as taught by Best et al. The rationale is as follows: One of ordinary skill in the art at the time of the invention would have been motivated to provide the disk drive of Nishida et al with a spindle motor that rotates at 10,000 rpm as taught by Best et al so that latency is reduced.

With regard to claims 6, 12, 14 and 19, Nishida et al in view of Best et al show all the features except for the disk

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having a diameter of 84 mm. A 3½ inch disk usually has a diameter of 95 mm. Best et al teaches a disk having a diameter of 65 mm. This shows that it was possible at the time the invention was made to make the disk 84 mm. Furthermore, Official Notice is taken that disks of 84 mm are known in the art. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to make the disks have a diameter of 84 mm through routine experimentation and optimization in the absence of criticality. Why is 84 mm better than 83 mm, or 65 mm for that matter?

Response to Arguments

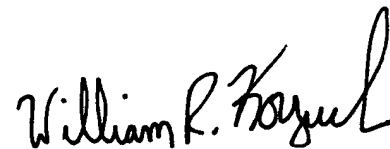
6. Applicant's arguments filed on September 14, 1999 have been fully considered but they are deemed to be moot in view of the new ground(s) of rejection.

7. The Declaration under 37 CFR 1.132 filed on September 14, 1999 is insufficient to overcome the rejection of claims 1-7, 11-14 and 18-20 based upon Nishida et al in view of Best et al because there is no showing that the claimed features were responsible for the commercial success.

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Conclusion

8. Any inquiry concerning this communication should be directed to William R. Korzuch at telephone number (703) 305-6137.


WILLIAM R. KORZUCH
PRIMARY EXAMINER

wrk
October 10, 2000